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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,785	10/17/2000	Chai Wah Wu	YOR9-2000-0410US1	9833

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EXAMINER	
HA, LEYNNA A	

ART UNIT	PAPER NUMBER
2135	6

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/688,785	WU, CHAI WAH	
	Examiner	Art Unit	
	LEYNNA T. HA	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-32 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-32 have been examined and are rejected under 35 U.S.C. 102(e).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. *Claims 1-32 rejected under 35 U.S.C. 102(e) as being anticipate by Chang, et al. (US 6,532,541).*

As per claim 1:

Chang, et al. discloses a method for generating an output file from a source file where benign modifications to content of the output file still render the output file authentic, comprising:

constructing an index vector from said source file; **[COL.8, lines 1-3 and 56]**

quantizing said source file; **[COL.5, lines 31-33 and 46-47]**

generating an authentication mark from the quantized source file and said index vector; **[COL.5, lines 34-35 and COL.6, lines 62-65]**

generating an authentication tag by appending the index vector to said authentication mark; **[COL.5, lines 15-23 and 36-45]**

and generating the output file by appending said authentication tag to said source file. **[COL.6, lines 66-67]**

As per claim 2: see COL.6, lines 62-65; discusses inserting said authentication tag to said source file by a robust data hiding algorithm.

As per claim 3: see COL.5, lines 15-20; discusses compressing said index vector.

As per claim 4: see COL.5, lines 36-39; discusses applying a distortion to said source file, to form a distorted file, wherein the generating of the output file is performed by appending said authentication tag to said distorted file.

As per claim 5: see COL.4, lines 15-18; discusses providing a reader for reading the source file.

As per claim 6: see COL.1, lines 20-25; discusses the source file is positioned in a smart card. **[the source file, which can be a photographic image, is inherently stored within a smart card type for use with a digital camera]**

As per claim 7: see COL.6, lines 62-65; discusses authentication mark is obtained by a digital signature algorithm.

As per claim 8: see COL.1, lines 28-39 and COL.3, lines 17-30; discusses wherein said authentication mark is obtained by a modification detection algorithm.

As per claim 9: see COL.3, lines 17-43; discusses authentication mark is obtained by a message authentication algorithm.

As per claim 10: see COL.4, lines 15-18; discusses source file includes image data.

As per claim 11: see COL.4, lines 15-18; discusses source file includes video data.

As per claim 12: see COL.4, lines 15-18; source file includes sound data. **[a type of source files maybe be an image data or a video data type wherein video data also inherently includes sound data.]**

As per claim 13: see COL.5, lines 38-45; discusses no distortion is added to the source file to generate the output file.

As per claim 14: see COL.3, lines 53-64; discusses tag is created simultaneously with a creation of said source file.

As per claim 15: see COL.5, lines 14-23; discusses authentication tag is created after the source file has been created, and is appended to the source file.

As per claim 16:

Change discloses a method for generating an output file from a source file where benign modifications to a content of the output file still render the output file authentic, comprising:

constructing an index vector from said source file; **[COL.7, lines 1-3]**

constructing a feature vector of said source file; **[COL.8, lines 1-3]**

quantizing said feature vector; **[COL.5, lines 31-33 and 46-47]**

generating an authentication mark from the quantized feature vector and said index vector; **[COL.5, lines 34-35 and COL.6, lines 62-65]**

generating an authentication tag by appending the index vector to said authentication mark; **[COL.5, lines 15-23 and 36-45]**

and generating the output file by appending said authentication tag to said source file. **[COL.6, lines 66-67]**

As per claim 17: see COL.8, lines 1-3; discusses constructing said index vector from said feature vector of said source file.

As per claim 18: see COL.5, lines 14-38; discusses generating a distorted file from said feature vector, wherein the generating of the output file is performed by appending said authentication tag to said distorted file.

As per claim 19: see COL.5, lines 31-32; discusses feature vector comprises discrete cosine transform coefficients.

As per claim 20:

Change discloses a method for generating an output file from a source file where benign modifications to a content of the output file still render the output file authentic, comprising:

constructing an index vector from said source file; **[COL.7, lines 1-3]**

quantizing said source file; **[COL.5, lines 31-33 and 46-47]**

compressing said index vector; **[COL.3, lines 55-62]**

generating an authentication mark from the quantized source file and said compressed index vector; **[COL.5, lines 34-35 and COL.6, lines 62-65]**

generating an authentication tag by appending the index vector to said authentication mark; **[COL.5, lines 15-23 and 36-45]**

and generating the output file by appending said authentication tag to said source file. **[COL.6, lines 66-67]**

As per claim 21:

Chang discloses method for generating an output file from a source file where benign modifications to a content of the output file still render the output file authentic, comprising:

constructing an index vector from said source file; **[COL.7, lines 1-3]**

quantizing said source file; **[COL.5, lines 31-33 and 46-47]**

compressing said index vector; **[COL.3, lines 55-62]**

generating an authentication mark from the quantized source file and said index vector; **[COL.5, lines 34-35 and COL.6, lines 62-65]**

generating an authentication tag by appending said compressed index vector to said authentication mark; and **[COL.5, lines 15-23 and 36-45]**

generating the output file by appending said authentication tag to said source file. **[COL.6, lines 66-67]**

As per claim 22:

Chang discloses method for generating an output file from a source file where benign modifications to a content of the output file still render the output file authentic, comprising:

constructing a feature vector from said source file; **[COL.7, lines 1-3]**

constructing an index vector from a feature vector of the source file; **[COL.8, lines 1-3]**

quantizing said feature vector according-to the index vector; **[COL.5, lines 31-33 and 46-47]**

generating an authentication mark from quantized feature vector and said index vector; **[COL.5, lines 34-35 and COL.6, lines 62-65]**

generating an authentication tag by appending the index vector to said authentication mark; and **[COL.5, lines 15-23 and 36-45]**

generating the output file by appending said authentication tag to said source file. **[COL.6, lines 66-67]**

As per claim 23: see COL.5, lines 15-20; discusses compressing said index vector.

As per claim 24:

Chang a method for authenticating a data file, comprising:

extracting an authentication tag from said data file; **[COL.7, lines 20-23]**

extracting an index vector from said authentication tag; **[COL.8, lines 25-27]**

extracting an authentication mark from said authentication tag; **[COL.8, lines 21-24]**

quantizing said data file; and **[COL.5, lines 31-33 and 46-47]**

verifying said index vector and said quantized data file with said authentication mark. **[COL.4, lines 15-29]**

As per claim 25: see COL.5, lines 15-20; discusses a compressed index vector.

As per claim 26: see COL.8, lines 10-29; discusses decompressing said compressed index vector prior to said quantizing of said data file.

As per claim 27: see COL.6, lines 62-65; discusses authentication mark is obtained by a digital signature algorithm.

As per claim 28: see COL.1, lines 28-39 and COL.3, lines 17-30; discusses authentication mark is obtained by a modification detection algorithm.

As per claim 29: see COL.3, lines 17-43; authentication mark is obtained by a message authentication algorithm.

As per claim 30:

Chang discloses method for authenticating a data file, comprising:

extracting an authentication tag from said data file; **[COL.7, lines 20-23]**

extracting an index vector from said authentication tag; **[COL.8, lines 25-27]**

extracting an authentication mark from said authentication tag; **[COL.8, lines 21-24]**

constructing a feature vector from said data file; **[COL.7, lines 1-3]**

quantizing said feature vector; and **[COL.5, lines 31-33 and 46-47]**

verifying said index vector and said quantized feature vector with said authentication mark. **[COL.4, lines 15-29]**

As per claim 31:

Change discloses a system for generating an output file from a source file where benign modifications to a content of the output file still render the output file authentic, said system comprising:

means for constructing an index vector from said source file; **[COL.7, lines 1-3]**

means for quantizing said source file; **[COL.5, lines 31-33 and 46-47]**

means for generating an authentication mark from the quantized source file and said index vector; **[COL.5, lines 34-35 and COL.6, lines 62-65]**

means for generating an authentication tag by appending the index vector to said authentication mark; and **[COL.5, lines 15-23 and 36-45]**

means for generating the output file by appending said authentication tag to said source file. **[COL.6, lines 66-67]**

As per claim 32:

Chang discloses a signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for generating an output file from a source file where benign modifications to a content of the output file still render the output file authentic, said method comprising:

constructing an index vector from said source file; **[COL.7, lines 1-3]**

quantizing said source file; **[COL.5, lines 31-33 and 46-47]**

generating an authentication mark from the quantized source file and said index vector; **[COL.5, lines 34-35 and COL.6, lines 62-65]**

generating an authentication tag by appending the index vector to said authentication mark; and **[COL.5, lines 15-23 and 36-45]**

generating the output file by appending said authentication tag to said source file. **[COL.6, lines 66-67]**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (703) 305-3853. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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